United States Department of Agriculture **Forest Service** **Daniel Boone National Forest**
1700 Bypass Road
Winchester, KY 40391
859-745-3100

File Code: 1900
Date: July 13, 2001

Dr. Ghassem R. Asrar
Associate Administrator
Office of Earth Science, National Aeronautics and Space Administration
NASA Headquarters, Code YO
300 E. Street, SW
Washington, DC 20546

Dear Dr. Asrar:

I am writing in regards to the Kentucky grant proposal submitted in response to NASA BAA-01-OES-01.

We have been involved with the Kentucky Office of Geographic information as the response to the State Local and Tribal Government NASA Broad Agency Announcement was prepared. We feel that this project will be a great benefit not only to the Commonwealth of Kentucky, but also through technology transfer, to state, local and tribal governments in the rest of the United States.

There is a real need for understanding the ability of the remote sensing discipline to discern broad forest classes and extents in very complex communities such as those which cover the landscape in Kentucky. It is also very important to understand how remote sensing can be used for initiatives such as Smart Growth to discern the uses of land in urban areas. Many urban areas in the United States do not have any kind of planning, not to mention planning and zoning. One of the instruments that can help them get started is a good land cover/use map like the one being proposed in the Kentucky grant proposal. Once the landscape can be categorized and visualized, the planning entities have a *'place to start'* which can be used to create use maps (as they exist when the imagery was interpreted) and a baseline to show how the landscape is changing in the future. The methodology offered can be proven by this project and then transferred to other areas of the country who – like many areas in Kentucky - do not have the kinds of data they need to begin planning how to use their landscapes.

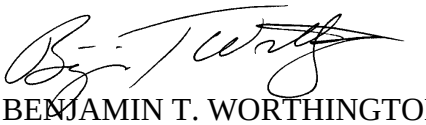
The Daniel Boone National Forest, at nearly 700,000 acres, is the largest piece of land in Kentucky under public ownership. It is within six hours driving of 23 million citizens and is managed for a large variety of uses and purposes, including recreation, wildlife habitat, wilderness, watershed protection, and timber production. These factors, together with the fragmented nature of the land ownership within our proclamation boundary, make for an extremely complex planning environment. It is our expectation that the data, information, and products that would result from the proposed project would be an highly valuable contribution to our assessment and planning needs. To ensure the viability of the investment NASA is willing to make in the State, Local and Tribal Government grant award, our agency is willing to provide

the skills and expertise of our Geographic Information System (GIS) specialist; the full range of our resource data, including GIS data coverages, high resolution aerial photography, forest stand data, and forest fire occurrence data; and the skills and expertise of our field personnel and other resource specialists for data and product reviews, testing of applications, and collecting of ground-based data.

Our contact for the proposed project is Bill Luhn, GIS program coordinator for the Daniel Boone National Forest. Please contact Bill if you have questions or for clarification about the role of our agency in the Kentucky grant proposal. Our telephone number is 859-745-3100. Bill can also be contacted by e-mail at bluhn@fs.fed.us

Thank you for your consideration of Kentucky's project proposal.

Sincerely,



BENJAMIN T. WORTHINGTON
Forest Supervisor

cc:
District Rangers

Susan Lambert
Executive Director
Governor's Office of Technology of Geographic Information
21 Mill Creek Park
Frankfort, KY 40601